Business Computer
VPC-700 Series

* Specifications, color and design of the products are subject to change without notice.

This product is a high-performance embedded-type personal computer equipped with the 6th-generation Intel ® Core ™ processor.

It has extension interfaces such as DVI-I, HDMI, DisplayPort, 1000BASE-T, USB 3.0, serial and Audio. These Units are ideal for a wide range of embedded applications, such as control devices and information terminals based on general-purpose PC OSes.

Embedded-type chipset and CPU have been adopted. The use of readily available parts ensures the ease of the use of the product.

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* The contents in this document are subject to change without notice.
* Visit the CONTEC website to check the latest details.
* The information in the data sheets is as of July 2022.

Features

Compatible with Intel ® Core ™ processor series Skylake
The product is equipped with the 6th-generation Intel ® Core ™ processor and greatly realizes lower-power consumption while ensuring fine performance of operation tasks and drawing. Adopting embedded-type CPU contributes to a stable supply.

The compact size that can install at a small area
This product is a compact size PC of 264(W)×263(D)×112(H)mm that can install at a small area.

Adopt removable storage
The product adopts front accessible 2.5-inch SATA storage, and also supports RAID function such as mirroring.

Supports mirroring (RAID1)
Mirroring enables the construction of redundant systems.

[Hardware RAID]
Selecting the optional mirror card enables the construction of hardware mirroring. Hot-swapping is also supported.

[Software RAID]
Software mirroring can be constructed, but hot-swapping is not supported.

Major types of peripherals are supported with rich interfaces including
It has a variety of extended interface such as PCI Express (×16) x 1slot, DVI-I x 1, HDMI x 1, DisplayPort x 1, 1000BASE-T x 3, USB3.0 x 6, USB2.0 x 2, serial (RS-232C/RS-422A/RS-485) x 1, Audio.

Supported OS

- **Windows 10 IoT Enterprise LTSB 2016 64bit**
  (Japanese / English / Chinese / Korean)
- **Windows 10 IoT Enterprise 2019 LTSC 64bit**
  (Japanese / English / Chinese / Korean)
- **Windows 10 IoT Enterprise 2019 LTSC 64bit with Microsoft Edge**
  (Chromium) (Japanese/English/Chinese/Korean)
- **Windows 7 Professional for Embedded Systems SP1 32bit**
  (Japanese / English) *1
- **Windows 7 Professional for Embedded Systems SP1 64bit**
  (Japanese / English) *1

*1   Select the language during the initial setup.

Specifications

Function specifications <1/2>

Item		Description		
		VPC-700-18000B	VPC-700-28000B	VPC-700-38000B
CPU [Selection]		Intel® Celeron® Processor G3900TE 2.3GHz	Intel® Core™ i5 Processor 6500TE 2.3GHz	Intel® Core™ i7 Processor 6700TE 2.4GHz
Chip set		Intel® Q170		
BIOS		BIOS (mfd. by AMI)		
Memory [Selection]		Max16GB, 260pin SO-DIMM Socket x 2, PC4-17000(DDR4 2133) DDR4 SDRAM 8GB: 8GB DDR4 SO-DIMM 2133MHz ×1 16GB: 8GB DDR4 SO-DIMM 2133MHz ×2		
Graphic *1		DVI-I x 1 *2, HDMI x 1, DisplayPort x 1, Supports three displays		
	Controller	Intel® HD Graphics 510	Intel® HD Graphics 530	
System resolution	HDMI	800x600, 1024x768, 1152x864, 1280x600, 1280x720, 1280x800, 1280x960, 1280x1024, 1360x768, 1366x768, 1400x1050, 1440x900, 1600x1200, 1680x1050, 1792x1344, 1856x1396, 1920x1080, 1920x1440, 2048x1152, 2048x1536, 2560x1600, 2560x1920, 2560x2048, 3840x2160 (16,770,000 colors)		
	Display Port	800x600, 1024x768, 1152x864, 1280x600, 1280x720, 1280x800, 1280x960, 1280x1024, 1360x768, 1366x768, 1400x1050, 1440x900, 1600x1200, 1680x1050, 1792x1344, 1856x1396, 1920x1080, 1920x1440, 2048x1152, 2048x1536, 2560x1600, 2560x1920, 2560x2048, 3840x2160 (16,770,000 colors)		
	DVI-I	800 x 600, 1024 x 768, 1152 x 864, 1280 x 600, 1280 x 720, 1280 x 768, 1280 x 800, 1280 x 960, 1280 x 1024, 1360 x 768, 1366 x 768, 1400 x 1050, 1440 x 900, 1600 x 900, 1600 x 1200, 1680 x 1050, 1920 x 1080, 1920 x 1200 (16,770,000 colors)		
Storage [Selection]		Removable drive, SATA III 2.5-inch x 2 SATA III 2.5-inch HDD 500GB (Max. 2pcs) SATA III 2.5-inch SSD 256GB (Max. 2pcs) Hardware RAID (Mirroring) / Software raid (Mirroring)		
Optical drive		Slim Super Multi drive		
Audio		3.5φ stereo minijack, HD Audio compliant Front : Line out, Mic in, 1 port Rear: Line in, Line out, Mic in, 1 port		
LAN		3 ports (RJ-45 connector) LAN-1: Intel I219-LM Controller, LAN-2, 3: Intel I210-AT Controller 1000BASE-T/100BASE-TX/10BASE-T, Wake On LAN support		
USB		A-TYPE connector Front : USB2.0 x 2 ports, Rear : USB3.0 x 6 ports		
Serial [Selection]		9pin D-SUB connector(male) RS-232C/422A/485 x 1 port, RS-232C up to 2 ports can be set. (occupies the expansion board slot) Baud rate : 50 - 115,200bps		
Expansion board slot		PCI Express ×16 1 slot Low Profile support Usable board dimension: Max. 150mm(L) x 67.9mm(H)		
Security (TPM)		TCG TPM2.0		
Hardware monitoring		Monitoring CPU temperature, system temperature, power voltage		
RTC/CMOS		The real-time clock is accurate within ±3 minutes (at 25℃) per month, Lithium backup battery life : 7 years or more		
Power Management		Power management setup via BIOS, Power On by Ring / Wake On LAN		
Supportable OS [Selection]		Windows 10 IoT Enterprise LTSB 2016 64bit (Japanese / English / Chinese / Korean) Windows 10 IoT Enterprise 2019 LTSC 64bit (Japanese / English / Chinese / Korean) Windows 10 IoT Enterprise 2019 LTSC 64bit with Microsoft Edge (Chromium) (Japanese/English/Chinese/Korean) Windows 7 Professional for Embedded Systems SP1 32bit (Japanese / English) Windows 7 Professional for Embedded Systems SP1 64bit (Japanese / English)		

Function specifications <2/2>

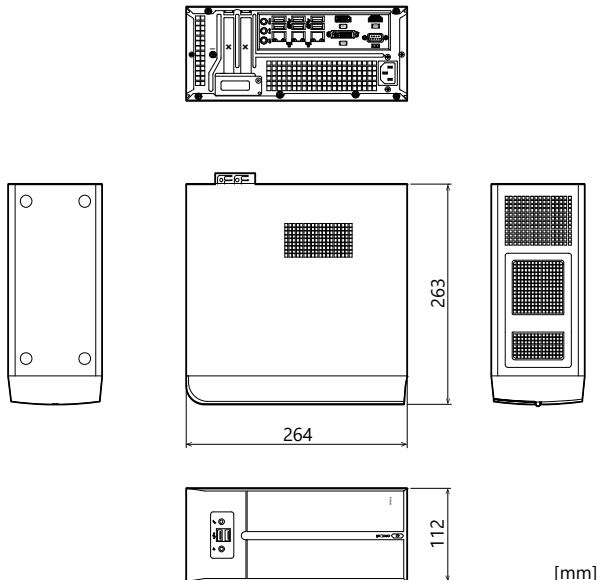| Item		Description		
		VPC-700-18000B	VPC-700-28000B	VPC-700-38000B
Power supply				
	Rated input voltage	100 - 240VAC (50/60Hz)		
	Range of input voltage	90 - 264VAC		
	Rated input currency	4A		
	Power consumption (Max.)	180W		
	External device power supply capacity	USB3.0 I/F : +5V : 5.4A (900mA x 6) USB2.0 I/F : +5V : 1A (500mA x 2) PCI Express x16 slot, 3.3V : 2.0A, +12V : 1.0A (19W or less)		
Physical dimensions (mm)		264(W)×263(D)×112(H) (No protrusions)		
Weight		About 4.3kg (Excluding attachment fittings)		

*1   If the display cable is connected after the PC turns on, Monitor may not be displayed.
*2   When connecting a display using only analog RGB on models with Windows 10 pre-installed (with "CSM Support" set to "Disabled"), a beep may be heard five times at startup, and the BIOS screen may not be displayed for some displays.
The OS screen will be displayed and the product can be used as normal.
To configure BIOS settings, use a different interface (DVI, HDMI, DisplayPort, etc.), or connect a different display.

Environment Requirements

Item		Description
Operating temperature		5 - 40℃
Storage temperature		-20 - +60℃
Operating Humidity		20 - 80%RH (No condensation)
Storage Humidity		5 - 80%RH (No condensation)
Floating dust particles		Not to be excessive
Corrosive gases		None
Line-noise resistance	Line noise	AC line / ±2kV, Signal line / ±1kV (IEC61000-4-4 Level 3, EN61000-4-4 Level 3)
	Static electricity resistance	Contact discharge / ±4kV (IEC61000-4-2 Level 2, EN61000-4-2 Level 2) Atmospheric discharge / ±8kV (IEC61000-4-2 Level 3, EN61000-4-2 Level 3)
Vibration resistance	Sweep resistance	10 - 57Hz / semi-amplitude : 0.075 mm, 57 - 150Hz / $9.8m/s^2$ (1G) 40 min. each in x, y, and z directions (JIS C60068-2-6 compliant, IEC60068-2-6 compliant)
Impact resistance		$98m/s^2$ (10G) / 11ms / half-sine shock for 3 times in x, y, and z directions (JIS C60068-2-27 compliant, IEC60068-2-27 compliant)
Standard		VCCI Class A, FCC Class A, CE Marking (EMC Directive Class A, Low Voltage Directive, RoHS Directive), UKCA, CCC *1
Grounding		Class D grounding, SG-FG / continuity

*1   For the CCC model only
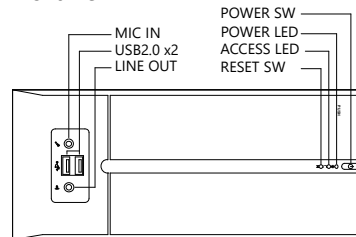
Physical Dimensions

264

263

112

[mm]

Packing List

Product...1
AC cable...1
DVI-analog RGB conversion adapter...1
Rubber Foot...4
Flat Screw for HDD *1...8
Binding Screw for Extension Board *1...2
Warranty Certificate...1
Serial Number Label...1
Product Guide...1
Recovery disk / Driver DVD *2...1
On-site Maintenance Service Pack *3...1
CCC Compliant AC Cable (250VAC, 3Ptype) *4...1
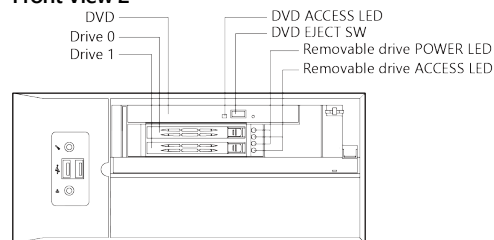Hazardous Substances Management *4...1

*1   The quantity varies depending on the product configuration.
*2   The recovery disk is included for the product with a Windows-OS installing type. The driver DVD is included for the product without an OS and an Ubuntu-OS (Linux) installing type.
*3   This is included when it is selected as an option.
*4   This is included when it is selected as a CCC support.
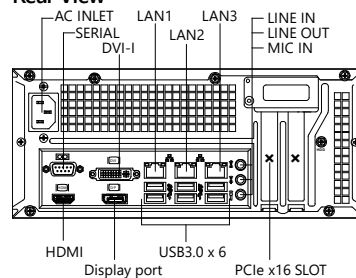
Nomenclature of Product Components

Front View

Front View 2

Rear View

Name	Function
POWER LED	Power ON display LED
ACCESS LED	SATA device access display LED
POWER-SW	Power switch
RESET SW	Reset switch
DVD	Slim super multi drive
Drive 0	SATA III 2.5 inch removable drive
Drive 1	
DVD ACCESS LED	DVD access display LED
DVD EJECT SW	Eject switch
Removable drive POWER LED	Drive connection display LED
Removable drive ACCESS LED	Drive access display LED
SERIAL	RS-232C/422/485 (9pin D-SUB connector (male)) 1 port

Name	Function
DVI-I	DVI-I 1 port
Display port	Display Port Connector 1 port
HDMI	HDMI (19pin HDMI TYPE-A connector) 1 port
USB3.0	USB3.0 (TYPE-A connector) 6 port (Rear)
USB2.0	USB2.0 (TYPE-A connector) 2 port (Front)
LAN	1000BASE-T/100BASE-TX/10BASE-T (RJ-45 connector) 3 port
AUDIO	Line in, Line out, Mic in (3.5φ stereo minijack) 1 port (Rear) Line out, Mic in(Front)
AC INLET	AC100-240V Power input connector

Model List

◆**BTO Model**

VPC-700 Model Rule

Model Name   **VPC-700**

Type Name	<u>B</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>R</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>
No.	1	2	3	4	5	6	7	8	9	10	11

No.	Item	Type Name	Description
1	Product	B	VPC-700
2	CPU	1	Celeron G3900TE (35W)
		2	Core i5 6500TE (35W)
		3	Core i7 6700TE (35W)
3	Memory	1	DDR4 SO-DIMM 8GB (8GB x 1)
		2	DDR4 SO-DIMM 16GB (8GB x 2)
4	Storage (Drive 0)	0	None
		1	500GB 2.5inch HDD
		2	256GB 2.5inch SSD
5	Storage (Drive 1)	0	None
		1	500GB 2.5inch HDD
		2	256GB 2.5inch SSD
6	Optics system drive (SATA 3)	1	Slim DVD Multi Drive
7	RAID	0	None
		H	Hardware RAID (Mirroring)
		R	Software RAID (Mirroring)
8	OS	0	None
		1	Windows 10 IoT Enterprise LTSB 2016 64bit (Japanese / English / Chinese / Korean)
		4	Windows 10 IoT Enterprise 2019 LTSC 64bit (Japanese / English / Chinese / Korean)
		2	Windows 7 Professional for Embedded Systems SP1 32bit (Japanese / English)
		3	Windows 7 Professional for Embedded Systems SP1 64bit (Japanese / English)
		D	Windows 10 IoT Enterprise 2019 LTSC 64bit with Microsoft Edge (Chromium) (Japanese/English/Chinese/Korean)
9	Increase option (COM port)	0	None
		1	COM port x1 (an expansion slot occupied)
		2	COM port x 2 (2 expansion slot occupied)
10	Onsite maintenance service	0	None
		2	Onsite maintenance service of 2 years
		3	Onsite maintenance service of 3 years
11	Other	1	Fan cover (for a vertical installation)

◆**Standard Model, CCC Model**

VPC-700 Model Rule

Model Name **VPC-700**

Type Name   **1 8 1 5 0 B C**

No.   1 2 3 4 5 6 7

No.	Item	Type Name	Description
1	CPU	**1**	Celeron G3900TE (35W)
		2	Core i5 6500TE (35W)
		3	Core i7 6700TE (35W)
2	Memory	**8**	DDR4 SO-DIMM 8GB (8GB x 1)
3	Storage *1	**1**	Drive 0: 500GB 2.5-inch HDD Drive 1: None
		5	Drive 0: 256GB 2.5-inchSSD Drive 1: None
4, 5	OS	**50**	Ubuntu (Linux) *2
		31	Windows 10 IoT Enterprise LTSB 2016 64bit (Japanese / English / Chinese / Korean)
6	Chassis color	**B**	Black
7	CCC	**C**	China Compulsory Certification

*1   OS is Ubuntu (Linux) when the storage is selecting HDD.

        OS is Windows 10 when the storage is selecting SSD.

*2   Operations are not supported since it is installed for boot checking purpose only.

● The optics system drive is installed as a standard feature.

● COM port connector is installed as a standard feature on the rear expansion slot.

Model Name		CPU	Storage	OS
Standard Model	**CCC Model**			
VPC-700-18150B	VPC-700-18150BC	Celeron G C3900TE	500GB HDD	Ubuntu (Linux)
VPC-700-28150B	VPC-700-28150BC	Core i5 6500TE	500GB HDD	Ubuntu (Linux)
VPC-700-38150B	VPC-700-38150BC	Core i7 6700TE	500GB HDD	Ubuntu (Linux)
VPC-700-18531B	VPC-700-18531BC	Celeron G C3900TE	250GB SSD	Windows 10 IoT Enterprise LTSB 2016
VPC-700-28531B	VPC-700-28531BC	Core i5 6500TE	250GB SSD	Windows 10 IoT Enterprise LTSB 2016
VPC-700-38531B	VPC-700-38531BC	Core i7 6700TE	250GB SSD	Windows 10 IoT Enterprise LTSB 2016